Title: Community-led molecular point-of-care testing for sexually transmitted infections in remote Australia

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Context and Aims: In Australia, molecular point-of-care testing(POCT) for chlamydia(CT), gonorrhoea(NG) and trichomonas(TV) has been programmatically implemented since 2016 in regional and remote Aboriginal and Torres Strait Islander communities. POCT is community-led and delivered through primary care clinics, often located significant distances from centralised laboratories. We evaluated POCT program reach and testing uptake to understand the individual and public health impact.

Process: Using program data from 2020–2023 we described the POCT network, target population, and test positivity by sex, age group and infection type. We estimated the number of infectious days averted using published median difference in time-to-treatment following a POC compared with a laboratory-based test.

Analysis: During the implementation period, 68 clinics offered POCT (10 regional, 4 remote, 54 very remote) across 6 jurisdictions. In total, 13459 CT/NG dual and 10800 TV single patient POC tests were conducted; 59.1% were in women, 63.5% in those 15 –29 years and 95.9% in Aboriginal and/or Torres Strait Islander people. Test positivity for CT was 10.0%, NG was 9.0%, and TV was 8.5%. Among those tested with both CT/NG and TV tests (n= 9393), positivity for any infection was 22.6% (women 22.1%, men 20.9%). Among those 15-19, 20-24, 25-29, and 30+ years, any positivity was 26.3%, 27.3%, 20.2% and 15.9.% respectively; 5.7% were positive for more than one STI, 1.1% were positive for all three (CT, NG and TV). POCT averted 25,570 infectious days for CT/NG and 23,050 days for TV.

Outcome: Young people experience the highest POC test positivity, with almost one in four having at least one infection. Future activities should focus on increasing access and uptake of POCT as part of a comprehensive approach to STI control to ensure all young people benefit from rapid treatment of all three infections, limiting both adverse sequelae and onward community transmission.

Aboriginal and Torres Strait Islander approvals:

This analysis was conducted using publicly available TTANGO3/First Nations Molecular Infectious Diseases POCT program data. POCT program governance includes oversight from the National Aboriginal and Torres Strait Islander Health Protection AHPPC Sub-Committee and POCT Leaders group. Program data are regularly shared and disseminated to stakeholders through online forums and newsletters.

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